REMARKS

In the Claims:

Claims 1-27 remain in this application. Claims 1 and 21 have been amended.

Rejections Under 35 U.S.C. 102(e):

Claims 1, 5, 7, 9, 12, 13, 21-25, and 27 were rejected under 35 U.S.C. 102(b) as being anticipated by Purvis et al. (U.S. 5,540,494) (hereinafter "Purvis").

Purvis fails to disclose all limitations of claims 1, 12, or 21; the rejection is unsupported in the art and should be withdrawn. The system disclosed in Purvis is a flow cytometer, used to measure thousands of particles a second. In such a system, particles (typically biological particles) suspended in a fluid flow rapidly through a manifold in single file. Light scatter generated by the particles passing in front of the light source may be measured. Such light scatter used in Purvis is forward angle light scatter ("FALS"), a summation of diffraction, refraction, and reflection (Purvis, col. 5, lines 56-58).

Purvis fails to disclose that the feature irradiated is substantially static in relationship to the radiation source, as recited in claims 1 and 21. In contrast, the "features" (particles) in Purvis are in motion, carried in a stream of fluid past the radiation source. Such motion in a cytometer allows the device to measure thousands of biological cells per second.

Purvis also fails to disclose a stage to hold a subject structure that includes a feature with a size to be measured, as recited in claim 12. The manifold cited by the Examiner is not a stage. The manifold of Purvis, in contrast to the stage recited in claim 12, is a channel through which the fluid containing the particles flows past the light source in a cytometer.

Claims 5, 7, 9, 13, 22-25, and 27 all depend from claims 1, 12, or 21. Purvis thus also fails to disclose all limitations of claims 5, 7, 9, 13, 22-25, and 27.

Purvis fails to disclose that the size identifier comprises the positions of maxima within the diffraction pattern, as recited in claim 9, that the feature size identifier comprises a set of maxima locations within the diffraction pattern, as recited in claim 23, that the feature size identifier comprises a set of minima locations within the diffraction pattern, as recited in claim 24, or that the feature size identifier comprises an envelope plot, as recited in claim 25. The Examiner relies upon Figure 2 of Purvis to disclose each of these things. However, Figure 2 of Purvis is simply a **predicted** intensity plot; it is not an identifier used to determine the size of the feature. (Purvis, Figure 2 caption; col. 6, lines 33-36.) Nowhere does Purvis disclose use of any of the positions of maxima, set of maxima locations, set of minima locations, or envelope plot as the feature size identifier. Rather, Purvis uses measured FALS (forward angle light scatter) to determine particle size (Purvis, col. 4, lines 63-67; col. 46, lines 3-9, among other places).

Rejections Under 35 U.S.C. 103(a):

Claims 6, 8, 11, 17, 19, 20, and 26 were rejected under 35 U.S.C. 103(a) as being unpatentable over Purvis and further in view of Littau et al. (US 6,429,930) (hereinafter Littau). Such a combination of references is improper.

As discussed above, Purvis is concerned with a cytometer, which measures particles, typically biological, flowing in a fluid past a light source. Littau is concerned with finding the center of focus for a lithographic system (see Littau, title, abstract), which is critical to make sure the lithographic patterns fall within an acceptable range (Littau, col. 1, lines 60-65; col. 10, lines 4-20). Littau does this by analyzing the difference of diffraction grating

signatures taken at different focus settings (Littau, col. 3, lines 41-52; col. 10, lines 57-62; col. 11, lines 18-43).

One of skill in the art would not combine Purvis with Littau to result in the claims of the present patent application. The cytometer of Purvis is not compatible with a lithography system; the two systems are not used in the same field of endeavor. In a cytometer, a stream of particles, such as biological cells, pass by a laser in a single file stream. One would not combine Littau with Purvis because one would not put wafers or dies in a stream of fluid flowing past a light source. The risk of damaging the wafers or dies would be too great. Further, as Purvis does not involve a lithography system, there would be no reason to use the method of Littau to find the center of focus of such a lithography system. Thus, because the references are incompatible and would not be combined by one of skill in the art, the rejections should be withdrawn.

Further, the Examiner has mischaracterized Littau as disclosing a system and method for determining the characteristics of a microelectric structure using a diffraction signature difference analysis. Littau does not determine the characteristics of a microelectric structure. Rather, Littau determines the focus characteristics (the center of focus) of a lithography system so that when the lithography system is used to make patterns on a wafer it will function correctly. Purvis, as stated above, does not disclose all limitations of the independent claims from which claims 6, 8, 11, 17, 19, 20, and 26 depend. Littau, being concerned with finding a center of focus and not disclosing how to measure a feature size, fails to rectify this deficiency.

Thus, because one of skill in the art would not combine the two references, and the references fail to disclose all limitations as recited in claims 6, 8, 11, 17, 19, 20, and 26, the rejections of claims 6, 8, 11, 17, 19, 20, and 26 should be withdrawn.

Claims 2, 3, 4, 10, and 14-16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Purvis. As discussed above, Purvis fails to disclose all limitations of claims 1, 12, and 21, from which claims 2, 3, 4, 10, and 14-16 depend. The Examiner's rejection of claims 2, 3, 4, 10, and 14-16 fails to rectify this deficiency.

Finally, Applicant requests that in future correspondence the Examiner point out with specificity what part of a reference is relied upon in making a particular rejection. MPEP 706.02(i) states that the Examiner should do so. In some of the current rejections, no indication of where in the reference(s) a particular disclosure is found is provided. For example, the rejections of claims 5, 7, and 27 give no indication of where Purvis might disclose the limitations cited. As another example, the rejections of claims 6, 8, 11, 17-20, and 26 give no indication of what parts of Purvis or Littau are relied upon in making the rejections.

Respectfully submitted,

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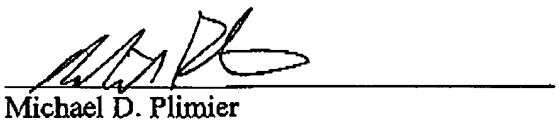

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